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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,985	12/05/2003	Katsuhito Gomi	Q78836	7242
23373	7590	07/13/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			LEE, PETER	
			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/727,985	Applicant(s) GOMI ET AL. 	
	Examiner Peter Lee	Art Unit 2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 5-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The matter in question is the limitation found on p. 6 lines 9-10 stating that the roller portion of the exfoliating member is able to increase a gap between the exfoliating member and the fixing roller. Examiner recognizes the roller to be part 183 according to the applicant's specification, however there exists no support for the applicant's current amended independent claim 5 and its dependent claims 6-9.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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2. Claims 1, 3, 10, 11-12, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashino (JP 09134090) in view of Tomatsu (US 2002/0131801).

Hashino teaches a fixing apparatus (as seen by Fig. 1), comprising: a heating roller (fig. 1 part 1) (ie. fixing roller/first roller), a pressing roller (fig. 1 part 1) (ie. pressing roller/second roller), rotated by being brought into press contact with the heating roller so that a press contact portion is formed (note: last sentence of paragraph [009]); an exfoliating member (fig. 2 part 10), exfoliating a sheet (part S) (ie. sheet-like record medium) from a surface of the heating roller after the record medium is passed through the nip (fig. 2 part 3; note paragraph [0011]) (ie. press contact portion/second region); and fixed parts (fig. 3 part 15) (ie. restricting members), provided at both end portions of the exfoliating member (as seen in Fig. 3), and brought into contact with the surface of the heating roller (ie. contact at first region of first roller) so that a clearance (ie. interval) between the surface of the fixing roller and the exfoliating member is restricted (note: paragraph [0021]); the fixed parts can clearly be seen to be touching the heating roller at a position outside the nip portion (ie. outside the press contact portion).

Hashino also teaches a middle portion of each of the fixed parts (ie. restriction members) in an axis direction thereof (Fig. 3 shows the fixed parts 15 coming into contact with the heating rollers at an axis normal to each other) is brought into contact at a portion outside the width of the paper passage (note: last sentence in paragraph [0012]) (ie. each of both end edge portions of the heating roller).

Hashino does not teach the heating roller (ie. fixing member) having a middle portion and both end portions in an axis direction thereof, the middle portion being smaller than the both end portions in a diameter.

Tomatsu teaches a heat roller (fig. 6 part 26) (ie. fixing member) being formed in the reversed arch crown shape (p. 5 paragraph [0092]) (ie. middle portion being smaller in diameter).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have a heating roller in the shape of a reversed arch as taught by Tomatsu, when building a fixing apparatus as taught by Hashino. One of ordinary skill in the art would have been motivated to do so because it is well known in the art that by using such an arched heating roller will decrease the chance of creasing the paper medium (page 1 paragraph [0006]).

3. Claims 2, 4, 13-15, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashino in view of Tomatsu, and further in view of Matsuyama et al. (US pn 4370051).

Hashino in view of Tomatsu teach all of the limitations as laid out above supra.

Hashino in view of Tomatsu do not teach the restricting member being arranged on an outer side of each of both end edge portions of the fixing roller.

It is Matsuyama who further teaches a photosensitive drum (fig. 2 part 6) (ie. fixing roller) having a separator pawl (fig. 2 part 21) (ie. exfoliating member) for stripping a recording paper off of the drum. The separator pawl is supported onto the photosensitive drum by pawl tips (fig. 2 part 21a) (ie. restricting member) that are in contact with grooves (fig. 2 part 6a) located at the longitudinal ends of the photosensitive drum (col. 4 lines 40-46) (ie. outer side of both end edge portions).

Although Matsuyama's invention is comprised of a photosensitive drum and not a fixing

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device, it is still considered analogous are because it is from the same field of endeavor of stripping a paper sheet off of a device found in an image forming apparatus. It just happens that Matsuyama deals with a separation pawl stripping the paper sheet off the photosensitive drum, and the other references pertain to stripping off the paper sheet off a fixing roller. It would have been obvious to a person of ordinary skill in the art at the time the invention was made, to have a separator pawl (ie. exfoliating member) being supported onto a photosensitive drum (ie. fixing roller) by pawl tips (ie. restricting member) that are in contact with grooves located at longitudinal ends of the photosensitive (ie. outer side of both end edge portions). One of ordinary skill in the art would have been motivated to take the set up mentioned above pertaining to a photosensitive drum, and apply it to a fixing device with the parts substituted as shown above, because it allows for easy access to the fixing roller and placement of the separating part (ie. pawl/exfoliating member) in accordance to the fixing roller (col. 7 lines 4-19).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kikuchi et al. (US 20030016971) is being cited for teaching a similar exfoliating member that utilizes restricting members onto a fixing roller.

Response to Arguments

6. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues on p. 9 last paragraph, that claim 5 currently includes the limitation of a record medium being able to push a roller that is part of the exfoliating device such that a gap between the exfoliating member and the fixing roller increases. Examiner argues that there is no support in the specification that teaches this limitation being part of the applicant's invention.

Proper rejection is shown above.

As to applicant's argument to claim 1 beginning on p. 10 of the response, in view of the currently amended claims, Examiner has withdrawn the prior art of Oda et al. It is taught by Hashino, to have the fixed parts that contact the fixing roller at a portion "outside the press

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contact portion” which is interpreted to literally mean the nip portion between the fixing roller and pressure roller.

As to applicant's arguments pertaining to claim 2 beginning on p. 13, Examiner maintains the rejection as currently is laid out above. The limitations of the claim state “an outer edge portion of each restricting member is arranged on an outer side of both end edge portions of the fixing roller”, which is not the same as having the middle portion of the restricting member touching an edge of the fixing roller. By reasoning that the photosensitive drum is analogous to a fixing roller for the shear similarity that they are part of an image forming apparatus what will at one point have a paper sheet passed through it, the claim limitations are met for having the separating pawl (part 21a) being situated at a position outside the photosensitive area, as further pointed out by applicant that the “pawl tips cannot touch the surface of the drum” (p. 14 lines 7-8).

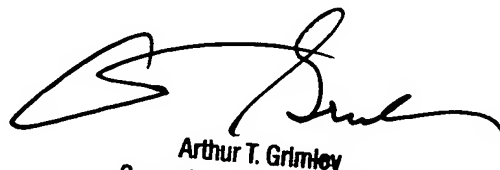
In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Lee whose telephone number is 571-272-2846. The examiner can normally be reached on mon-fri 9:00 am-5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on 571-272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PL 7/6/05



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